WHAT IS CLAIMED IS:

1. A simple *in vitro* culture system, which is suitable for the replication of hepatitis C virus (HCV), comprising:

HCV-infected cells cultivated in the presence of an HCV-activating composition, said activating composition comprising at least one mitogen; and

a non-infected cell type which is infectable with HCV, whereby said activating composition enables a full replication cycle of said HCV in both the originally infected cells and non-infected cell type.

2. The system of claim 1, wherein said activating composition also comprises a cytokine.

3. The system of claim 1, wherein said activating composition is selected from the group consisting of a) phytohaemagglutinin and IL-2; b) Staphylococcus aureus crown I (SAC) and IL-4; and c) SAC, IL2 and IL-4.

4. A tissue culture system for HCV which enables the screening and development of drugs and therapies for essentially all the different stages of virus replication such as virus entry, replication [viral (-) and (+) strand synthesis], viral protein synthesis, virus assembly, virus trafficking, and virus release.

5. A method of generating a vaccine to HCV comprising a pulsing of monocyte-derived dendritic cells (DCs) with

HCV, co-cultured with autologous peripheral blood lymphocytes from a HCV-seropositive individual.

6. A method of activating the replication of HCV in PBMCs or PBLs comprising obtention of same from a HCV-infection patient and activating the replication of HCV by incubating the PBMCs or PBLs with an activation-inducing amount of at least one mitogen (e.g. activator).

7. A co-culturing system for replicating HCV *in vitro* which comprises co-culturing PBMCs (or PBLs) infected with HCV, wherein the PBMCs have been activated and in which the HCV can replicate, together with a cell line, wherein the co-culturing enables infection of the cell line and replication of the HCV thereinto. In a particular embodiment of the present invention, the cell line is an immortalized cell line.

8. The system of claim 7, wherein said cell line is an immortalized cell line.

9. An assay for screening a test agent and selecting an agent which possesses anti-HCV activity, comprising:

a) growing a HCV infected cell according to an *in vitro* assay of the present invention; and

b) assaying replication, translation, assembly infection or the like of HCV.

10. A method for identifying, from a library of compounds, a compound with anti-HCV activity, comprising:

a) providing a screening assay comprising a measurable biological activity of HCV;

b) contacting said screening assay with a test compound; and

c) detecting if said test compound inhibits the biological activity of HCV;

wherein a test compound which inhibits said biological activity is a compound with said inhibitory effect.

11. The method of claim 10, wherein the test compound with said therapeutic effect is further modified by combinatorial or medicinal chemistry to provide further analogs of said test compound also having said therapeutic effect.

12. A compound having therapeutic effect on HCV, comprising:

a) providing a screening assay comprising a measurable biological activity of HCV;

b) contacting said screening assay with a test compound; and

c) detecting if said test compound inhibits the biological activity of HCV;

wherein a test compound which inhibits said biological activity is a compound with said inhibitory effect.

13. The compound of claim 12, wherein the compound

with said therapeutic effect is further modified by combinatorial or medicinal chemistry to provide analogs of said compound also having said therapeutic effect.